

FREYKIN, Z.G.

"Story of the famous Russian geographer, Aleksandr Ivanovich
Voeikov." V.V.Pokshishevskii. Reviewed by Z.G.Freikin. Geog. v
shkole 19 no.5:73-74 8-0 '56. (MLRA 9:11)
(Voeikov, Aleksandr Ivanovich, 1842-1916)
(V.V.Pokshishevskii)

FREYKIN, Z.

BABAYEV, A.; FREYKIN, Z.; TERNOUSHKO, N.M., red.; ABRAMOV, V.N., tekhn.red.

[Ashkhabad; a geographical study] Ashkhabad; geograficheskii ocherk.
Ashkhabad, Turkenskoe gos. izd-vo, 1957. 104 p. (MIRA 11:3)
(Ashkhabad--Description)

FREYKIN, Z

32N/5
621.121
.B1

ASHKhabAD (GEOGRAFIChESKII OChERK) (GEOGRAPHIC DESCRIPTION OF ASHKHABAD, BY)
Z. FREYKIN (1) A. BABAYEV, ASHKHABAD, TURKMENSKOYE GOS. IZD-VO, 1957.
104 P. ILLUS., MAPS, PLANS, TABLES.
FREYKIN, ZAKHAR GRIGOR'YEVICH JT. AUTH.

FREYKIN, ZAKHAR GRIGOR'YEVICH

Call No: None given

Freykin, Zakhar Grigor'yevich

Turkmenskaya SSR; ekonomiko-geograficheskaya kharakteristika
(Turkmenskaya SSR; Economic and Geographical Features)
[2d ed., rev. and enl.] Moscow, Geografiz, 1957,
450 pp., 8,000 copies printed.

Ed.: Dobronravova, A.O.; Tech. Ed.: Nogina, N.I.;
Map Ed.: Chentsova, V.A.

Resp. Ed.: Kunin, V.N., Corresponding Member, Academy of
Sciences, Turkmenskaya SSR, Doctor of Geographical
Sciences

PURPOSE: The purpose of the book is to provide convenient
reference on the Turkmenskaya SSR and its economic
and social problems. The book is intended for
economists, teachers and students of geography.

COVERAGE: See Table of Contents
Card 1/7

Turkmen SSR; Economic and Geographical Features (Cont.) ^{Call No: None given}

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Turkmen SSR; Economic and Geographical Features (Cont.) Call No: None given

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Turkmen SSR; Economic and Geographical Features (Cont.) ^{Call No. None given}

COVERAGE: The book is divided in two parts: the first deals with the Republic as a whole and the second describes the individual oblasts. These, in turn, are divided into their organic economic regions (units). The analysis of geographical features predominates in the book, although the first part also provides the reader with an historical background. The industries of this Republic have developed along the railways, the rivers and the coast, with 40 per cent of the manufacturing located at Ashkhabad, the capital. The only exceptions to this rule are the sulphur mines and plant at Sernyy Zavod and Darvaza, in the middle of the Karakumy desert. Kara-Bogaz-Gol enterprises strip mirabilite (glauber salt) from the bottom of evaporated marshy lakes, but the development of local industries is hampered by lack of fresh water. Another group of industries along the Caspian shore comprises Cheleken iodine, bromine, ocher, and oil and ozocerite enterprises. The oil and natural gas region is located mainly south of the Krasnovodsk-Ashkhabad railway.

Card 5/7

Turkmen SSR; Economic and (Cont.)

Call No: None given

The petroleum industry of the Republic shows marked progress and oil derricks, scattered in the barren desert, are steadily growing in number; Nebit-Dag is the Turkmen oil capital. In 1956 the Republic produced 3,430,000 tons of oil. A pipeline leads from Vyshka to the Krasnovodsk refinery; a natural gas pipeline to Krasnovodsk is under construction. During the earthquake of 1948, the worst in Turkmen history, Ashkhabad's industrial enterprises, administrative and residential buildings and railway station were destroyed. The earthquake claimed thousands of victims. The restoration of the city's industrial enterprises is described to some extent. To-day the city numbers 142,000 inhabitants. One of the engineering plants manufactures petroleum equipment. A cement plant was built at Bezmein, which is practically a suburb of Ashkhabad. The city produces silk, cotton textile, shoes, and meat products. Tables show areas under crop cultivation, with special emphasis on cotton; the irrigation network is being expanded. Cotton grows in the area of Chardzhou and along the Murgab River. Sheep and dromedars are included in animal husbandry. Most electricity (94.5 per cent) come from oil-burning steam-power stations, although the book mentions a series of hydro-electric installations on the Murgab River.

Card 6/7

Turkmen SSR; Economic and (Cont.)

Call No: None given

Semi-anthracite is being mined on an industrial scale at Kugitang, although the Republic has other coal and brown-coal reserves, thus far little exploited. In addition to Darvaza and Sernyy Zavod, there is another sulphur-winning area near Gaurdak. Recently the large railway project linking Chardzhou with Kungrad was completed. The Karakum Canal is to-day's largest construction job and the gigantic scheme of the great Turkmen Canals not discussed. There are 65 photographs (a dozen illustrate Turkmen industries), 30 maps, 20 tables, and 155 Soviet references.

AVAILABLE: Library of Congress

Card 7/7

Freykin, Z.G.

SUBJECT: USSR/Geography of the USSR

25-4-13/34

AUTHOR: Nazarevskiy, O.R. and Freykin, Z.G., Candidates of Geographical Sciences

TITLE: Sunny Uzbekistan (Solnechnyy Uzbekistan)

PERIODICAL: Nauka i Zhizn', April 1957, No 4, pp 29-32 (USSR)

ABSTRACT: After a geographical description of Uzbekistan, the country is being analyzed with respect to its industrial development since it was taken over by the Soviets. Uzbekistan is the second largest producer of cotton cloth in the USSR. The cities of Samarkand and Kokand have each their superphosphate producing plants. The chemical plant at Chirchik is the largest producer of nitrate fertilizers and the one at Kuvasay is specializing in toxic chemicals for agricultural needs in the USSR. The city of Begovat has the only metallurgical plant for ferrous metallurgy in the whole of central Asia. Characteristic of Uzbekistan is the fact that its newly built up industry is equally spread across the whole country and not concentrated around cities and along railways alone.

Card 1/2

Uzbekistan's climate is hot and dry and extensive irrigation is therefore of vital importance in the plains. Rice, grapes, sugar cane and an abundance of various fruit is grown in the

TITLE:

Sunny Uzbekistan (Solnechnyy Uzbekistan)

25-4-13/34

kolkhozes which cover a surface of over 12 million hectares. Cotton, however, is the pride of Uzbekistan. In 1956, for example, 2,500,000 tons of cotton were harvested. Across the Syr-Darya river a huge dam was built in 1957 in order to form the Kayrak-Kum reservoir with a capacity of 4 billion cu m of water for irrigation purposes and for a powerful hydro-electric station, which will be completed in 1957. Although this power station is erected in the territory of Tadzhikistan, the republics of Uzbekistan and Kazakstan will mainly profit by it, due to their geographical position. (to be continued)

This article contains eleven illustrations.

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

TITLE: Sunny Uzbekistan (Solnechnyy Uzbekistan)

25-5-14/35

biology, and medicine are under construction at the Institute. An establishment for solving complex mathematical problems will be the automatic computing center which is under construction right now and controlled by the Uzbek Academy of Science.

The article contains 3 photos and 6 pictures.

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Card 2/2

FREYKIN, Z.

"The Caspian Sea and its basin" by B.A. Apollov. Reviewed
by Z. Freikin. Geog.v shkole 20 no.4:75 J1-Ag '57. (MLRA 10:7)
(Caspian Sea) (Apollov, B.A.)

PREYKIN, Z.G.

GELLER, S.Yu.; ZIMINA, R.P.; KEMMERIKH, A.O.; KUNIN, V.N.; KUVSHINOVA, K.V.;
MURZAYEV, E.M., doktor geograf.nauk; RYAZANTSEV, S.N.; FORMOZOV,
A.N.; *PREYKIN, Z.G.*; CHUBUKOV, L.A.; ZABIROV, R.D.; KOROVIN, Ye.P.;
ROZANOV, A.N.; RODIN, L.Ye.; RUBTSOV, N.I.; SPYGINA, L.I., red.
izd-va; POLENOVA, T.P., tekhn.red.

[Central Asia; its physical geography] Srednialia Azia; fiziko-
geograficheskaya kharakteristika. Moskva, 1958. 647 p. (MIRA 11:6)

1. Akademiya nauk SSSR. Institut geografii. 2. Institut geografii
Akademii nauk SSSR (for Geller, Zimina, Kemmerikh, Kunin, Kuvshinova,
Murzayev, Ryazantsev, Formozov, *Preykin* Chubukov). 3. Akademiya
nauk Kirgizskoy SSR (for Zabiroy). 4. Akademiya nauk Uzbekskoy SSR
(for Korovin). 5. Pochvennyy institut AN SSSR (for Rozanov). 6.
Botanicheskiy institut AN SSSR (for Rodin). 7. Akademiya nauk
Kazakhskoy SSR (for Rubtsov)
(Soviet Central Asia--Physical geography)

AUTHOR: Freykin, Z.G.

10-58-2-29/30

TITLE: A Meeting on the Study of Complex Regional Problems in Tashkent (Soveshchaniye po issledovaniyu rayonno-compleksnykh problem v Tashkente)

PERIODICAL: Izvestiya Akademii nauk SSSR -- Seriya geograficheskaya, 1958, Nr 2, pp 157 -- 159 (USSR)

ABSTRACT: A conference on the study of complex regional problems was convened by the Institute of Economics of the AS USSR in Tashkent from 8 to 12 October 1957. Representatives of SOPS, of the Institute of Economics and Geography of the USSR Academy of Sciences and of the academies of the various republics took part in this meeting. Kh. Abdullayev, President of the Uzbek AS opened the conference by giving a review of the activities of the Uzbek Academy of Sciences over the past 7-8 years. Furthermore, the conference heard the following reports: K.N. Bezdrintsev (Institute of Economics of the AS UzSSR) on "Methods and Organization of the Research of Complex Regional Economical Problems"; M.Ya. Senin (Institute of Economics of the AS USSR) on "The Problem of Labor Resources and Their Utilization in the Research of Complex Regional Problems"; A.V. Osorgin (Institute

Card 1/3

A Meeting on the Study of Complex Regional Problems in Tashkent 10-58-2-29/29

of Economics of the AS of the Kasakh SSR) on "Principles in the Construction of a Unified Transportation System in Kazakhstan"; N.M. Kokosov (Ural Branch of the AS USSR) on the importance of the development and solution of inter-regional problems; V.S. Belousova (Eastern Siberian Branch of the AS USSR) on shortcomings in large construction projects which make it necessary to revise primary planning even after long research studies; Yu.O. Alferov (AS of the Uzbek SSR) on problems of complex development of the Angren and Almalyk mining areas; N.S. Yashvili (Institute of Economics of the AS of the Georgian SSR) on problems of developing the suburban national economy in connection with complex regional problems; O.Kh. Karchikyan (Institute of Economics of the AS of the Armyansk SSR) on the same subject; I.M. Semenov (Komi Branch of the AS USSR) on "Special Features in the Research of Complex Regional Problems in Sparsely Populated Regions of the North"; I.M. Naydich (AS of the Kirghiz SSR) on "The Complex of the Bol'shoy Naryn"; N.N. Nekrasov (SOPS of the AS USSR) on the change of several research methods in this field; G.I. Zayko (Gosplan Uzbek SSR) on the importance of the work carried out by the Uzbek Academy of Sciences; G.N.

Card 2/3

A Meeting on the Study of Complex Regional Problems in Tashkent 10-58-2-29/29

Cherdantsev (AS of the Uzbek SSR) on the great importance of raising the scientific level and the applied methods in the research carried out on complex regional problems.

1. Economics—Conference—USSR

Card 3/3

FREYKIN, Z.

"The U.S.S.R. as it is"; a popular illustrated handbook. Reviewed by Z. Freikin. Geog. v shkole 22 no. 4: 92-93 J1-A4: '59.
(MIRA 12:11)

(Russia--Handbooks, mammals, etc.)

30(1)

SOV/26-59-2-9/53

AUTHOR: Freykin, Z.G., Candidate of Geographical Sciences
(Moscow)

TITLE: Irrigation Farming of Uzbekistan (Polivnoye zemlede-
liye Uzbekistana)

PERIODICAL: Priroda, 1959,⁴⁶ Nr 2, pp 39-48 (USSR)

ABSTRACT: Uzbekistan is the main cotton base of the Soviet Union. It produces 2/3 of all the cotton in the country (3 million tons in 1958). With the foreseen increase of the cotton production (3.8 million tons by 1965), the author reviews the present state and a possible increase of irrigated surfaces of Uzbekistan. Lately, 18,000 hectares of moving sands were transformed into arable land. New administrative rayons were created (Zadar'inskiy, Buzskiy and **Yaz'yavanakiy rayons**). Further 173,000 hectares are being prepared for a new cotton region. In the region of Golodnaya Step', another 380,000 hectares will be irrigated by 1966. The construction of the Kayrak-Kum reservoir, the largest in Central Asia,

Card 1/2

Irrigation Farming of Uzbekistan

SOV/26-59-2-9/53

rendered possible these increases. This reservoir has a general area of 520 square km, its volume - 4 billion cubic m. There are 7 photographs, 1 map and 2 Soviet references.

ASSOCIATION: Institut Geografii Akademii Nauk SSSR (Geographic Institute of the AS USSR)- Moscow

Card 2/2

FREYKIN, Z.G.

Requirements for republic textbooks on economic geography.
Geog. v shkole 23 no. 5:86-89 8 - 0 '60. (MIRA 13:9)
(Geography, Economic--Textbooks)

FREYKIN, Z.G.

Studying productive capacities of the Uzbekistan. Izv. AN SSSR.
Ser. geog. no.5:150-152 S-0 '60. (MIRA 13:10)
(Uzbekistan--Economic geography)

FREYKIN, Z.G.

Most important changes in the economic geography of the republics
of Central Asia. Geog. v shkole 24 no. 1:8-18 Ja-F '61.

(MIRA 14:2)

(Asia, Soviet Central— Industries, Location of)

(Asia, Soviet Central—Economic conditions)

DOMETTI, A.A.; ZIMINA, A.M.; KALININ, F.P.; LAKTIONOVA, P.I.; MOROSHKINA, O.I.;
MYASISHCHEVA, Ye.I.; NECHAYEVA, Yu.A.; PREOBRAZHENSKIY, A.I.; RUSH,
V.A.; RYNDIN, A.A.; SAUCHKIN, Yu.G.; STROYEV, K.F.; TEREKHOV, P.G.
[deceased]; FREYKIN, Z.G.; SHESTAKOV, V.N.

Nikolai Nikolaevich Baranskii's 80th birthday. Geog. v shkole 24
no.4:7-8 J1-Ag '61. (MIRA 14:8)
(Baranskii, Nikolai Nikolaevich, 1881)

DOLGOPOLOV, G.V.; KAZANSKIY, N.N.; KRYUCHKOV, V.G.; MAYERGOYZ, I.M.;
MINTS, A.A.; NAZAREVSKIY, O.R.; PETRYAYEVA, D.A.; POKSHISHEVSKIY,
V.V.; PRIVALOVSKAYA, G.A.; PULYARKIN, V.A.; RYAZANTSEV, S.N.;
FREYKIN, Z.G.; KHOREV, B.S.

Gennadii Petrovich Matveev; obituary. Izv. AN SSSR. Ser.geog.
no.6:144-145 N-D '62. (MIRA 15:12)
(Matveev, Gennadii Petrovich, 1926-1962)

FREYKIN, Z.

"U.S.S.R. and United States; facts and figures." Reviewed by Z.
Freikin. Geog. v shkole 24 no.5:90-91 S-O '61. (MIRA 14:8)
(United States--Economic conditions)
(Russia--Economic conditions)

FREYKIN, Z.O.,

Turkmeneskaya SSR; Ekonomiko-Geograficheskaya Kharakteristka. Moscow, Geogragiz, 1954
v. illus., map. tables, 21 cm.
Includes bibliographical references.

DOLGOPOLOV, Konstantin Vasil'yevich; SOKOLOV, Aleksey Vasil'yevich;
FEDOROVA, Yevgeniya Fedorovna; SKOBNIKOV, M.L.,
retsenzent; TYLKINA, M.A., st. nauchn. sotr., retsenzent;
FREYKIN, Z.G., st. nauchn. sotr., retsenzent; RODIONOVA,
F.A., red.; PASHCHENKO, O.V., red. kart; KARPOVA, T.V.,
tekhn. red.

[Iron ores of the U.S.S.R.] Zheleznye rudy SSSR; posobie
dlia uchitel'ia. Moskva, Uchpedgiz, 1963. 157 p.

(MIRA 17:2)

1. Glavnyi spetsialist Gosplana SSSR (for Skobnikov).
2. Institut chernoy metallurgii imeni Baykova (for Tylkina).
3. Institut geografii AN SSSR (for Freykin).

ZAYCHIKOV, V.T.; MASHBITS, Ya.G.; NAZAREVSKIY, O.R.; FEDOROVICH, B.A.;
FREYKIN, Z.G.

Teaching geography in the secondary school. Izv. AN SSSR. Ser.
geog. no.5:110-118 S-0 '63. (MIRA 16:10)

BIBIK, A.Ye.; DOMETTI, A.A.; ZMINA, A.M.; LAKTIONOVA, P.I.; MAKSIMOV,
M.A.; MOROSHKINA, O.I.; MYASISHCHEVA, B.I.; ERDELI, V.G.;
NECHAYEVA, Yu.A.; PADEZHNOV, A.I.; PREOBRAZHENSKIY, A.I.;
RAUSH, V.A.; RYNDIN, A.A.; SAUSHKIN, Yu.G.; SMIRNOVA, N.P.;
STROYEV, K.F.; TOPORKOV, I.D.; FREYKIN, Z.G.

Fedor Pavlovich Kalinin; obituary. Geog. v shkole 26 no.2:85
Mr-Ap '63. (MIRA 16:4)

(Kalinin, Fedor Pavlovich, 1899-1962)

FREYKIN, Z.G.

Irrigation farming of Central Asia and its geographical
characteristics. Geog. v shkole 26 no.5:7-17 S-0 '63.
(MIRA 16:11)

BATYROV, Allan; FRIZKIN, Z.G., kand. geogr. nauk, red.

[The Karakum Canal; a short study of the territory of
southeastern Turkmenistan in connection with the
construction of the Karakum Canal] Karakumskii kanal.
oчерk istorii izucheniia territorii iugo-vostochnoi
Turkmenii v sviazi so stroitel'stvom Karakumskogo ka-
nala. Chardzhou, Turkmenskii gos. pedagog. in-t, 1961
31 p. (MIRA 18:7)

ANDREYEVA, V.M.; KNYAZHINSKAYA, L.A.; NAZAREVSKIY, O.R.; FREYKIN, Z.G.

Problems of population geography at the scientific conference
on the population of Central Asia. Izv. AN SSSR. Ser. geog.
no. 1:145-148 Ja-F '66 (MIRA 19:2)

POLUYANOV, G.I.; FREYLAKH, S.A.

Semiautomatic dividing machine for plotting logarithmic scales.
Stan. i instr. 35 no.11:28-30 N '64. (MIRA 18:3)

FREYLA KH, S.A.; KUZYUKIN, A.M.

Introducing a semiautomatic machine for zigzag winding of the
sensitive elements of pickups. Biul.tekh.-ekon.inform.Gos.
nauch.-issl.inst.nauch.i tekh.inform. 18 no.11:60-61 N '65.
(MIRA 18:12)

FREYKMAN, A.I., inzh.

Precast techniques in the construction of jetties and
breakwaters. Transp. stroi. ll no.7:25-27 Jl '61. (MIRA 14:7)
(Precast concrete construction) (Jetties)
(Breakwaters)

FREYKMAN, A.I., inzh.

Experimental construction of a wave damping berm made of
tetrapods. Transp.stroi, 13 no.10:25-27 0 '63.

(MIRA 17:8)

FREYKMAN, A.I.

Some problems in the protection of the shingly shores of the Caucasian coast of the Black Sea. Okeanologiya 2 no.1:153-159 '62.
(MIRA 15:2)

(Black Sea--Shore Protection)

ZHDANOV, A.M., kand. tekhn. nauk; FREYKMAN, A.I., inzh.

Using full shaped sea groins and breakwaters for the formation
of a protective beach strip on the Black Sea coasts of the
Caucasus. Trudy TSNIIS no.50:32-64 '63. (MIRA 17:9)

FREYKMAN, Ye.

Stand for a vise bench in school workshops. Politekh.obuch.
no.11:74-75 N '58. (MIRA 11:12)
(Tools)

FREYLIGER, L.A., inzhener; YAKOBSON, Ya.M.

Production of cement fibrolite. Biul.stroi.tekh.10 no.16:7-10 N '53.
(MLRA 6:11)

1. Industroyproyekt.

(Building materials)

FREYLIGER, L.^{A.} inzh.

Plant producing elements for building large-panel apartment houses.
Na stroi. Mosk. 1 no.7:9-14 J1 '58. (MIRA 11:9)
(Moscow--Concrete plants)

FREYLIKH, Grigoriy Zalmanovich, 1891 - Mikhaylovskiy;
SARNO, O.S., 1911.

[Channel-dredging fleet] Dno-glubitel'nyy flot. Moskva, Transport, 1964. 298 p. (MIRA 18:1)

otics; Resins; Paints;
Surface Coatings

mat
6

Stabilisation of cellulose triacetate films against thermo-oxidative destruction. A. A. Freiman, V. A. Bartashev, L. I. Shagalova, V. V. Ganneman, G. P. Marova, and E. I. Ovchinnikova. *J. Appl. Chem. USSR*, 1952, 25, 628-633. The thermal oxidation of cellulose acetate (I) results in the formation of CO₂ and CO, decarboxylation of the (I) and lowering of its mol. wt. through chain breakage. The accumulation of CO₂ and CO in the gas phase is proportional to the time of oxidation and is closely connected with the mechanism of oxidative degradation. Phenyl-naphthylamine affords good protection against O₂ at 140°.

R. C. MURRAY

MA
7-13-59

Leningrad Inst. Motion Picture Engineers, Lab. 7 Motion Picture
Film Base Technology

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Cellulose and Paper

⑥ *matte*
Stabilization of cellulose triacetate films against thermo-
oxidative destruction. A. A. Prelihan, V. A. Bartashev,
L. I. Shagalova, V. V. Ganneman, R. P. Marova, and V. L.
Ovchinnikova. *J. Appl. Chem. U.S.S.R.* 25, 705-11
(1952) (Engl. translation).--See C.A. 47, 2979g.

H. I. H.

7-17-54

FREYMAN, A. A.

PA 228T13

USSR/Chemistry - Photofilm Stabilizers Aug 52

"The Change in the Amount of Stabilizers in Triacetate Films During Destruction by Oxidation at Elevated Temperatures," A. A. Freyman, V. A. Bartashov, L. I. Shagalova, N. L. Perfilova, V. D. Kurchenko, Lab of Techno for Moving Picture Film Base, Leningrad Inst of Moving Picture Film Engineers

"Zhur Prikl Khim" Vol 25, No 8, 884-889

States that stabilizers present in films are subject to chem change to a greater deg than

(1) 228T13

stabilizers in their free form, under similar conditions. The nature of the change in the quantity of phenyl- α -naphthylamine and phenyl- β -naphthylamine is identical in films. During the process of oxidation, the amt of stabilizer changed, whereas there was no thermal decrn of phenyl- β -naphthylamine when heated at 1400 C. Intermediate products of the oxidation of aromatic amines were also shown to be stabilizers of triacetate films. The action of oxygen on plasticized, stabilized films, at a temp of 1400 C, was studied. The simultaneous presence of a stabilizer (secondary amine) and dibutylphthalate

(2) 228T13

assured a greater resistance of both to the effect of oxygen at high temps.

(3) 228T13

Effect of electrolytes on the viscosity of cellulose nitrate solutions. P. Y. Izrael, A. A. Preiman, E. S. Shvartsman, and L. K. Lokutskevskaya (Inst. Eng. Engineers, All-Union Sci. Research Kirov Photo Ind., Leningrad). Kolloid. Zhur. 16, 115-19 (1954). — The apparent viscosity η of 2% solns. of cellulose nitrate (D (11.5% N) in COMe), calculated, assuming Poiseuille's Law, decreased from 0.17 to 0.12 poises when $\log \eta$ increased from 1.4 to 3.0 sec.⁻¹ at 20°, η being the velocity gradient. When LiCl equiv. to the OH groups of I was added, η was lowered (to 0.14-0.11 poises) but $d\eta/d \log \eta$ was similar. However, when the amt. of LiCl was equiv. to the ONO₂ groups or to the ONO₂ and OH groups combined, η was small (0.033 poises) and independent of η . Thus, to eliminate structural viscosity, each ONO₂ group must be blocked by one LiCl. The effect of LiCl on 18% soln. of I in EtOH + Et₂O was similar, while 0.2% solns. (which exhibit no structural viscosity) were not affected by LiCl. The mol. wt. (from η of I used was 43,000 independently of the amt. of LiCl added; thus, the depression of η by LiCl was not due to depolymerization.

I. J. Bickerman

USSR.

✓ Effect of electrolytes on the viscosity of cellulose nitrate solutions. P. V. Kozlov, A. A. Fridman, B. S. Shvachkin, and L. K. Lokutsievskaya. *Colloid J. U.S.S.R.* 16, 123-8 (1954) (Engl. translation).—See *C.A.* 48, 8037f.
H. L. H.

VEKSLER, V.I., kand.khimicheskikh nauk, dotsent, FREYMAN, A.A., kand.
khimicheskikh nauk

Methods for determining the C-terminal amino acids of plant
proteins. Trudy VNIIZ no.38:213-218 '60. (MIRA 15:12)

1. Leningradskiy institut sovetskoy trgovli imeni F.Engel'sa.
(Amino acids)

MEL'TEVA, N.N.; SHCHAGINA, L.V.; FREYMAN, A.A.

Protein substances in cabbage. Report No.2: Determining the functional groups of proteins. Izv.vys.ucheb.zav.; pishch.tekh. no.1:63-65 '64.
(MIRA 17:4)

1. Leningradskiy institut sovetskoy trgovli, kafedra organicheskoy i fiziko-kolloidnoy khimii.

FREYMAN, A.A.; VEKSLER, V.I.; REZNICHENKO, M.S. [deceased]

Determination of C-terminal amino acid residues in plant
proteins by the hydrazinolysis method. Biokhimiia 29 no.4:
583-585 J1-Ag '64. (MIRA 18:6)

1. Kafedra khimii Instituta sovetskoy torgovli imeni Fr.
Engel'sa, Leningrad.

MUKVOZ, L.G.; FREYMAN, A.G.; PANOK, S.Yu.

Effect of hymenolepiasis on the course of chronic dysentery in infants.
Med. paraz. i paraz. bol. no.4:298-301 O-D '54. (MLRA 8:2)

1. Iz Zaporozhskoy oblastnoy protivomalyariynoy stantsii i Zaporozhskogo doma rebenka.

(DYSENTERY, BACILLARY, in infant and child,
with hymenolepiasis)

(TAPEWORM INFECTION, in infant and child,
hymenolepiasis with bacillary dysentery)

SOBOL', S.I.; NELEN', I.M.; SPIRIDONOVA, V.I.; BERLIN, Z.I.;
GORIYACHKIN, V.I.; TARAKANOV, B.M.; SHKURSKIY, V.D.; Prinsipali
uchastiye: FREYMAN, A.K., inzh.; BRUK, B.M., inzh.;
CHEBOTKEVICH, G.V., inzh.; OSPIN, V.G., inzh.; ALEKSANDROVA, N.N.,
laborant; SALT'YKOV, I.B., laborant; TELKOVA, Ye.I., laborantka;
TEPLYAKOV, Yu.M., laborant; GAVRILENKO, A.P., slesar';
KURGUZOV, A.S., elektrik; GAVRILOV, I.T., elektrik

Pilot-plant testing of the State Institute of Nonferrous
Metals flow sheet for the autoclave retreatment of cop; r-
molybdenum intermediate products. Sbor. nauch. trud. Gin-
tsvetmeta no.19:319-339 '62. (MIRA 16:7)

(Nonferrous metals—Metallurgy)
(Leaching)

AUTHORS: Leytman, L. D. and Freyman, A. V. SOV/138-59-2-11/24

TITLE: Manufacture of Hosepipe Without Using Mandrels
(Izgotovleniye rukavov bezdornovym sposobom)

PERIODICAL: Kauchuk i rezina, 1959, ⁸Nr 2, pp 38-40 (USSR)

ABSTRACT: This technique enables hoses of any length to be produced, whereas those wound on mandrels are usually limited to 20 metres. The layout of the plant is shown in a diagram. The rubber mix is fed into a screw extruder to produce a tube which is then cooled. The extruded tube is taken through two braiding machines with intermediate impregnation and drying. The braided pipe, after being coated with a rubber cement, is given an outer covering of rubber applied by a bevelled head screw extruder. The pipe is then cooled and the outer covering is perforated so that the air in the braid can be vented before the next stage. This stage involves sheathing the pipe temporarily with lead. Before the lead is applied the pipe is dusted, preferably with graphite, to prevent adhesion of the lead to the outer rubber covering. The temporary lead sheath with a wall

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Manufacture of Hosepipe Without Using Mandrels

thickness of 2 to 2.2 mm is extruded at a temperature in the upper part of the bevelled head of 160° to 180°C and in the lower part at a temperature of 170° to 230°C. The internal diameter of the lead sheath must be 1.5 to 2 mm less than the external diameter of the covered pipe. Before vulcanization the sheathed pipe is filled with water at 85° to 95°C and 8 to 10 atm. pressure, and its ends are sealed. The sheathed pipe, filled with water, is rolled onto a drum carried on a trolley and put into a vulcanizing chamber. On conclusion of vulcanizing the lead sheathing is stripped and re-used. Particular points mentioned are: the necessity for accurate tension control of the braided threads (at about 500 g), lay up of the braid at 3° to 5° less than the optimum angle of 54°44' since the pitch of the first braid will increase 5 to 8 mm during subsequent operation. Introduction of a supplementary pull through roll between the two braiding machines, and another after the second braid is applied, were found essential. Separate speed control of the braiding machines and accurate synchronization at all stages is

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Manufacture of Hosepipe Without Using Mandrels

necessary to prevent over-stretching of the inner rubber tube. During the braiding and impregnating stages the internal pressure in the tube, which plays the part of a soft mandrel, should be between 0.10 and 0.15 atm. Less pressure leads to reduction in diameter of the hose during braiding, over pressure leads to swellings and porosity. The internal pressure can be raised to 4 atm. while the outer rubber cover is applied. At the present time two plants are in operation producing pneumatic tubing 18 mm internal diameter for working pressure of 10 atm, and a third plant for 9 mm diameter pipe. The cost of the mandrelless process is not at present less than by the normal method, but it is expected that with further improvement of the process this will be reduced. There is one figure.

ASSOCIATION: Kazanskiv zavod rezino-tekhnicheskikh izdeliy
(Kazan' skiy zavod tekhnicheskikh izdeliy)

Card 3/3

KIRSANOV, N.V.; ZALEZNYAK, P.N.; FREYMAN, A.V.; SADIKOVA, V.N.; VALOVA, Ye.P.

Use of bentonite in the manufacture of technical dipped rubber goods. Kauch. i rez. 24 no.10:49-50 '65.

(MIRA 18:10)

1. Kazanskiy geologicheskii institut i Kazanskiy zavod rezinovykh tekhnicheskikh izdeliy.

KARP, G.A.; MAYZELIS, B.A.; REKPMAN, A.N.; TROPIMOVICH, D.P.;
FREYMAN, A.V.; SHEPELEV, M.I.

. Studying the effect of stresses taking place during helium
blowing on the quality of meteorological radiosonde shells.
Kauch. i rez. 24 no.11:34-35 '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.

L 12803-66 EWT(1)/EWT(m)/FCC/T DS/WW/GW

ACC NR: AP5028902

SOURCE CODE: UR/0138/65/000/011/0034/0035

AUTHOR: Karp, G. A.; Mayzelis, B. A.; Rekhman, A. N.; Trofimovich, D. P.;
Freyman, A. V.; Shepelev, M. I.

56

ORG: Scientific Research Institute of Rubber and Latex Products (Nauchno-issle-
dovatel'skiy institut rezinovykh i lateksnykh izdeliy)

B

TITLE: Study of the effect of stresses arising during the swelling of the gel on the
quality of meteorological radiosonde envelopes

7

SOURCE: Kauchuk i rezina, no. 11, 1965, 34-35

12,44,55

TOPIC TAGS: radiosonde, gel, rubber, mechanical stress

ABSTRACT: In the manufacture of radiosonde envelopes, an important parameter is the magnitude of the stress arising in the course of swelling of the gel. The effect of this parameter on the tensile properties of type-150 envelopes was studied. The stress was varied by changing the duration of syneresis from 10 min to 7 hr, which caused changes in stress ranging from 5 to 11 kg/cm². In order to characterize the tensile properties of envelopes of the same size but prepared in different ways, use was made of the so-called quality factor (ratio of ultimate elongation of envelope to ultimate elongation of sample). To determine this factor on an instrument for two-dimensional deformation, the ultimate elongations of samples cut out of envelopes with various stresses in the gel were measured. The ultimate elongations of these samples were all found to be equal on swelling and amounted to

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UDC: 678.061:678.017:620.172.21

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ACC NR: AP5028902

$\lambda = 8.8$. On the basis of tests of samples and envelopes, the dependence of the quality factor of radiosonde envelopes was plotted versus the stress in the gel during swelling (see Fig. 1).

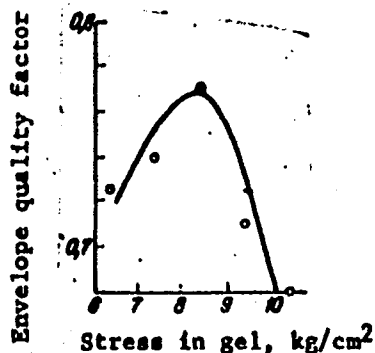


Fig. 1 Quality factor of type-150 envelopes vs. stress in gel during swelling

The following parameters are recommended for adoption in the manufacture of type-150 envelopes: gel swelling, up to $\lambda = 4.2$; stress in gel during swelling, 8 ± 0.5 kg/cm².

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 007

jw

Card 2/2

FREYMAN, G. A.

280

Freyman, G. A. Solution of Waring's problem in a new form. *Uspehi Matem. Nauk (N.S.)* 4, no. 1(29), 193 (1949). (Russian)

The author announces the following result. Let $\{n_i\}$ be a sequence of positive integers such that $2 \leq n_1 \leq n_2 \leq \dots$; then a necessary and sufficient condition that every positive integer be expressible in the form $x_1^{n_1} + \dots + x_r^{n_r}$, with x_1, \dots, x_r positive integers and r not greater than some bound depending only on n_i , is that $\sum n_i^{-1}$ diverge.

P. T. Bateman (Princeton, N. J.).

87m

Source: Mathematical Reviews,

Vol 11

No. 3

FREYMAN, G. A.

Mathematical Reviews

Vol. 15 No. 2

Feb. 1954

Number Theory

Freiman, G. A. On the exponential density of sequences.

Izvestiya Akad. Nauk SSSR. Ser. Mat. 16, 385-388 (1952). (Russian)

The exponential density of an increasing sequence S of positive integers is $\liminf_{x \rightarrow \infty} (\log \pi(x)) / (\log x)$, where $\pi(x)$ is the number of terms of S which do not exceed x . Let A be a given increasing sequence a_1, a_2, \dots of positive integers and let η_k be the exponential density of kA , the increasing sequence formed by those positive integers which are expressible in the form $a_1 + a_2 + \dots + a_k$. The author proves several inequalities for η_k under various restrictions on A and shows that these inequalities are best possible. For example, he proves that if $a_i - a_{i-1} = O(a_i^{\epsilon})$, then $\eta_k \geq 1 - \epsilon^k$. All the proofs are elementary.

P. T. Bateman.

FREYMAN, G. A.

FREYMAN, G. A.--"On the Presentation of Numbers in the Form of a Sum of an Infinite Number of Components." Min Higher Education USSR. Kazan' State U imeni V. I. Ul'yanov-Lenin. Kazan', 1955. (Dissertation for the Degree of Candidate in Physicomathematical Science).

SO Knizhnaya letopis'
No 2, 1956.

FREYMAN, G. A.

Freiman, G. A. An elementary method of solution of problems on the partition of numbers into an unbounded number of summands. Trudy Moskov. Mat. Obšč. 4 (1955), 113-124. (Russian)

A positive increasing divergent sequence (a_i) is given, and the object is to obtain, by elementary methods, asymptotic formulae for

$$p(N) = \frac{q(N) - q(N-h)}{h}, \quad p_r(N) = \frac{q_r(N) - q_r(N-h)}{h}$$

where $q(N)$ is the number of solutions of

$$a_1 n_1 + a_2 n_2 + \dots + a_r n_r + \dots \leq N$$

in integers $n_i \geq 0$, $q_r(N)$ is the number of solutions with $n_r = 0$ when $r > 0$, and h is a fixed member of the sequence (a_i) . The rate and regularity of growth of a_i are restricted by conditions on a (twice differentiable) function a_i equal to a_i at $i = r$ ($r = 1, 2, \dots$). The restrictions correspond roughly to rates of growth between r^{δ} and $\exp(r^{\delta})$ ($\delta > 0$). The formula for $p_r(N)$ is

(OVER)

FREIMAN, G. A.

$$1) \quad \rho_r(N) \sim \frac{e^E}{\sqrt{(2\pi w(1-e^{-w\alpha_r})Y)}} e^T,$$

where

$$E = \lim_{r \rightarrow \infty} \left\{ \int_1^r \log a_r dz - \sum_{r=1}^{r-1} \log a_r - \frac{1}{2} \log a_r \right\}$$

and w, Y, N are functions of (r, N) defined by

$$N = \int_1^r \frac{a_r dz}{e^{w a_r} - 1}, \quad Y = \int_1^r \frac{a_r^2 e^{w a_r} dz}{(e^{w a_r} - 1)^2},$$

$$T = Nw - \int_1^r \log(1 - e^{-w a_r}) dz.$$

The formula for $\rho_r(N)$ is the formal result of replacing r everywhere by ∞ . The proof of (1) is by induction from r

FREIMAN, G. A.

to $r+1$ based on the recurrence relation

$$p_{r+1}(N) = p_r(N) + p_r(N - a_{r+1}) + p_r(N - 2a_{r+1}) + \dots$$

When r is not too large, simple inequalities are derived from this and the assumed properties of a_r , but for larger values of r the argument is supplemented by estimates of $p_r(N - \Delta)/p_r(N)$ based on the assumption that suitable inequalities for $p_r(\cdot)$ are already known. The precise meaning of (1) is not stated explicitly, and the details and logical arrangement of the second stage of the induction argument are obscure. But so far as can be judged from the context, the meaning seems to be that the ratio of the two sides of (1) tends to 1 as a Pringsheim double limit when $r, N \rightarrow \infty$. 2/5

A. E. Ingham.

Freiman, G. A. Inverse problems of the additive theory of numbers. Izv. Akad. Nauk SSSR. Ser. Mat. 19 (1955), 275-284. (Russian)

Suppose given a positive increasing divergent sequence $\{a_r\}$, and let $n(n)$ be the number of $a_r \leq n$ and $q(N)$ the number of solutions of

$$a_1 n_1 + a_2 n_2 + \dots \leq N$$

(O. K. Ruz'skiy)

FREIMAN, G. A.

in integers $n, \geq 0$. The author begins by stating the theorem (i) that $\log q(u) \sim Au^\alpha$ implies $n(u) \sim Bu^\beta$ (as $u \rightarrow \infty$), where A, α, B, β are positive constants connected by

$$(1-\alpha)(1+\beta)=1, \quad B\Gamma(1+\beta)\zeta(1+\beta)=(1-\alpha)(Ax)^{1+\beta};$$

and he then raises the question of strengthening hypothesis and conclusion in this theorem. He proves (ii) that, if

$$\log q(u) = Au^\alpha + O(u^{\alpha_1}) \quad (\alpha_1 < \alpha),$$

then

$$n(u) = Bu^\beta + O(u^\beta / \log u);$$

and (iii) that this conclusion cannot be improved, even if the hypothesis is replaced by

$$(1) \quad q(u) \sim A_0 u^\alpha \exp(A_1 u^\alpha).$$

The proof of (ii) is based on the formulae

$$g(s) = s \int_0^\infty e^{-su} q(u) du, \quad \log g(s) = \int_0^\infty e^{-su} d\pi(u) \quad (s > 0),$$

where

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FREEMAN, G. A.

$$g(s) = \prod_k \frac{1}{1 - e^{-s \alpha_k}}, \quad \Pi(u) = \sum_{k=1}^{\infty} \frac{1}{k} n\left(\frac{u}{k}\right).$$

The main steps are (a) an Abelian inference from $q(u)$ to $g(s)$ ($u \rightarrow \infty$, $s \rightarrow 0+$), (b) a Tauberian inference from $\log g(s)$ to $\Pi(u)$, (c) an application of the Möbius inversion formula. In the corresponding proof of (i) a classical Tauberian theorem of Hardy and Littlewood would be appropriate under (b); in (ii) this is replaced by the known developments of this theorem by Postnikov, Freud, and Korevaar. An example constructed by Korevaar in this connection provides a model for (iii). By a similar construction the sequence $\{r^{1/n}\}$ is modified so as to yield a sequence $\{a_n\}$ for which $n(u) = u^a + O(u^a/\log u)$ while the asymptotic behaviour (I) of $q(u)$ remains undisturbed; this last point being established by means of a general theorem of the author (see the paper reviewed above).

A. E. Ingham (Cambridge, England).

5/5

Rad
5/5

FREYMAN, G. A.

Freyman, G. A. Inverse problems of additive number theory. Uch. Zap. Kazan. Univ. 115 (1955), no. 14, 109-115. (Russian)

Let $\{a_r\}$ be a strictly increasing sequence of positive integers and denote by $q(N)$ the number of solutions of the inequality

$$(*) \quad a_1 n_1 + a_2 n_2 + \dots \leq N$$

in non-negative integers n_1, n_2, \dots . The normal procedure then consist in deriving information about $q(N)$ from given data relating to $\{a_r\}$. It is shown in the present paper that the converse procedure is equally feasible. The principal result proved is as follows. Let $A > 0$, $0 < \alpha < 1$, and let β be an arbitrary real number. Then the asymptotic formula

$$\log q(N) \sim AN^\alpha (\log N)^{-\beta} \quad (N \rightarrow \infty)$$

holds if and only if

$$a_r \sim Dr^{(1-\alpha)/\alpha} (\log r)^{\beta/\alpha} \quad (r \rightarrow \infty),$$

Freiman, G. A.

where D can be expressed explicitly in terms of α and β . There is an analogous result for $q^*(N)$, the number of solutions of (*) with each n_i equal to 0 or 1. The main tools used in the proof are a Tauberian and an Abelian theorem of Hardy and Ramanujan [Proc. London Math. Soc. (2) 16 (1917), 112-132; Theorems A and B] and a theorem on Stieltjes integrals [Theorem 108 of Hardy, Divergent series, Oxford, 1949; MR 11, 25]. The paper concludes with an application to a problem in statistical thermodynamics.

L. Mirsky (Sheffield).

2/2

Smw

Handwritten: 1955-1956
FREYMAN, G.A.

Inverse problems in the additive theory of numbers. Izv.AN SSSR.
Ser.mat.19 no.4:275-284 J1-Ag'55. (MLRA 8:10)

1. Predstavleno akademikom I.M.Vinogradovym
(Numbers, Theory of)

Freyman, G. A.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp. There are 9 references, 6 of which are USSR, 2 English, and 1 German.

Freyman, G. A. (Kazan'). On one Elementary Method of the Theory of Numbers and the Theory of Probabilities. 14

Chudakov, N. G. (Saratov). Classification of Characters of Number Semigroups. 15-16

Mention is made of Bredikhin, V. N. and Bronshteyn, B. S.

Shidlovskiy, A. B. (Moscow). One one Class of Transcendent. 15-16

There are 4 references, 2 of which are USSR, 1 English, and 1 German.

Algebra Section 17-41

Card 6/80

FREYMAN, G.A.

Poincaré's and Perron's theorems. Usp.mat.nauk 12 no.3:241-246
My-Je '57. (MIRA 10:10)
(Difference equations)

FREYMAN, G.A.

SOV/52-2-4-7/7

AUTHOR: None Given.

TITLE: A Summary of Papers Presented at the Sessions of the Scientific Research Seminar on the Theory of Probabilities. (Moscow, February - May, 1957). (Rezyume dokladov, sdelaynykh na zasedaniyakh nauchno-issledovatel'skogo seminaru po teorii veroyatnostey. (Moskva, fevral' - May 1957 g.)

PERIODICAL: Teoriya Veroyatnostey i yeye Primeneniya, 1957, Vol.II, Nr.4, pp.478-488. (USSR)

ABSTRACT: Kolmogorov, A.N., On stochastic processes (General definitions of regularity and singularity. The amount of information per unit of time). Freyman, G.A. (Yelabuga), Local limit theorems for large deviations from the mean and their application to number theory. An expression is given for the number of solutions of the equation

$$x_1^n + x_2^n + \dots + x_k^n = N \text{ as } k \rightarrow \infty \text{ and } k < \gamma N, \text{ where}$$

Card 1/1. $0 < \gamma < 1$, and N is a positive integer.

16(1)

AUTHOR: Freyman, G.A.

06324

SOV/140-59-6-25/29

TITLE: On the Addition of Finite Sets. I

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1959,
Nr 6, pp 202-213 (USSR)

ABSTRACT: Let K be the set of the k different integers a_0, a_1, \dots, a_{k-1} . The set of the numbers $a_i + b_j$, $a_i \in K$, $b_j \in N$ is denoted as the sum $K+N$ of the sets K and N . For an addition of equal sets the sum is denoted with $2K$. Let the number of numbers in $2K$ be T .
Theorem 1: $T = 2k-1$ then and only then if $K = \{0, a, 2a, \dots, (k-1)a\}$, $a > 0$.
Theorem 2: $T = \frac{k(k+1)}{2}$ only if all positive differences of the numbers of K are different.
Theorem 3: $T = 2k$, $k \geq 4$ then and only then if $K = \{0, 2a, 3a, \dots, ka\}$ or $K = \{0, a, 2a, \dots, (k-2)a, ka\}$.
Theorem 4 gives 6 forms of K for which $T = 2k+1$, $k \geq 5$ (necessary and sufficient assumption).
Theorem 5: For $k \geq 3$, $0 \leq b < k-2$ and $T = 2k-1+b$, K is a subset of $K_a = \{0, a, 2a, \dots, (k+b-1)a\}$.

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On the Addition of Finite Sets. I

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Theorem 6: If K has not the form $\{0, b, 2b, a, a+b, 2a\}$ for $k \geq 3$ and $T = 3k-3$, then K is contained either in an arithmetic series of the length $2k-1$ or in two arithmetic series with the same difference and a common length k :

(3) $K = \{0, a, 2a, \dots, (k_1-1)a, b, b+a, \dots, b+(k-k_1-1)a\}$.

The author mentions L.G.Shnirel'man.

ASSOCIATION: Yelabuzhskiy gosudarstvennyy pedagogicheskiy institut
(Yelabuga State Pedagogical Institute)

SUBMITTED: February 9, 1959

Card 2/2

FREYMAN, G.A.

Inverse problems of the additive theory of numbers. Addition of sets of residues on the prime number modulus. Dokl. AN SSSR 141 no.3:571-573 N '61. (MIRA 14:11)

1. Matematicheskiy institut im. V.A. Steklova AN SSSR. Predstavleno akademikom I.M. Vinogradovym.
(Numbers, Complex)

FREYMAN, G.A.

Inverse problems of the additive theory of numbers. Part 4.
Addition of finite sets. Section 2. Uch. zap. EGPI 8:72-116 '60.
(MIRA 15:7)
(Numbers, Theory of)

FREYMAN, G.A.

Inverse problems in the additive theory of numbers. Part 6.
Addition of finite sets. Section 3: Addition of different
sets. Izv. vys.ucheb. zav.; mat. no.3:151-157 '62. (MIRA 15:9)

1. Yelabuzhskiy gosudarstvennyy pedagogicheskiy institut.
(Numbers, Theory of)

FREYMAN, G.A.

Inverse problems of the additive theory of numbers. Part 7.
Addition of finite sets. Section 4. Method of trigonometric sums.
Izv.vys.ucheb.zav.; mat. no.6:131-144 '62. (MIRA 15:12)

1. Yelabuzhskiy gosudarstvennyy pedagogicheskiy institut.
(Numbers, Theory of) (Aggregates)

ROZMAN, G. . (G. Yel-bay)

Inverse problems in additive number theory. art 8. . Erdős's
hypothesis. 128. vys. ushes. 1980. mat. no. 1:156-171. '82.
(1982 17412)

FREYMAN, G.A.

Addition of finite sets. Dokl. AN SSSR 158 no.5:1038-1041 0 '64.

(MIRA 17:10)

1. Yelabuzhskiy gosudarstvennyy pedagogicheskiy institut. Predstavleno akademikom P.S.Novikovym.

FREYMAN, G.A. (Yelabuga)

Inverse problems in additive number theory. Part 9.
Addition of finite sets. Part 5. Izv. vys. ucheb. zav.; mat. no. 5:
168-178 '64. (MIRA 18:3)

FREYMAN, G.I.

~~SECRET~~ School-excursions as the way of extending the technical training
of students. Geog. v shkole 21 no.5:63-66 S-O '58.
(MIRA 11:10)

1. Shkola No.150, Leningrad.
(Industrial tours) (Technical education)

FREYMAN, G.I.

ARLOZOBROV, Z.G., starshiy nauchnyy sotrudnik; GUDELYUK, O.K.; FREYMAN, G.I.

Resistance of erythrocytes from defibrinated blood during prolonged
preservation. Vop.perel.krovi 4:242-248 '55. (MLPA 9:12)

(BLOOD—COLLECTIONS AND PRESERVATION)

(ERYTHROCYTES)

L 6827-65 ENT(1)/ENA(h)/ PJ-L ASD(d)/RAEM(a)/AEDC(a)/RAEM(c)/SSD/AFMD(t)/
 ACCESSION NR: AP4044106 ASD(f)/AFWL/AFETR/ S/0141/64/007/003/0514/0523
 ASD(a)-5/ESD(gs)/ESD(t)/RAEM(t)

60
59

AUTHORS: Belyantsev, A. M.; Freydman, G. I.

TITLE: Finite-amplitude electromagnetic waves in coupled transmission lines with nonlinear parameters

SOURCE: IVUZ. Radiofizika, v. 7, no. 3, 1964, 514-523/

TOPIC TAGS: electromagnetic wave, transmission line, shock wave propagation, nonlinear system, shock wave decay

ABSTRACT: Certain peculiarities of electromagnetic waves in coupled (multiconductor) transmission lines with nonlinear parameters are considered. In the linear approximation and at arbitrarily low frequencies, such systems, unlike two-conductor lines, can support several normal modes. Consequently, as in magnetohydrodynamics, such transmission lines can carry several types of either simple electromagnetic waves or electromagnetic shock waves. The shock wave

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L 6847-65

ACCESSION NR: AP4044106

in turn can be nonevolutional in some cases, i.e., they can break up under the action of arbitrarily small perturbations into several discontinuities. It is shown further, in analogy with magnetohydrodynamics, that the structure of stationary non-evolutional shock waves cannot be uniquely determined. Using two coupled transmission lines with nonlinear parameters as an example, it is shown that in two coupled lines a nonevolutional shock wave breaks up into two evolutional shock waves which propagate with equal velocity, whereas the break-up of a nonevolutional shock in an unbounded linear medium produces shock waves that propagate with different velocities. Orig. art. has: 6 figures and 16 formulas.

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 28Sep63

ENCL: 00

SUB CODE: EC

NR REF SOV: 018

OTHER: 000

Card 2/2

FREYMAN, I., RATANOVA, V.; BELYKH, Ye.; SOSEDOV, N.; SOLODOVNIK, P.

Using methyl bromide for the disinfection of grain in elevator treatment bins. Muk.-elev.prom. 26 no.5:21-22 My '60. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki.

(Grain—Disinfection) (Bromides)

FREYMAN, I.; RATANOVA, V.; BELYKH, Ye.; SOSEDOV, N.

Disinfection of sacks with methyl bromide. Muk.-elev. prom. 26 no.9:
24-25 S '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki.

(Bromides)

(Bagging)

(Disinfection and disinfectants)

SOSEDOV, N.; BATANOVA, V.; FREYMAN, I.; MEN'SHOVA, L.; MARKIN, A.; NEPILONOV,
A.; LEVCHENKO, Ye.; SKOPINSKIY, V.; ARSENIPOVA, Ye.

Disinfection of grain with methyl bromide in the ship's hold. Mak.-
elev. prom. 26 no.10:12-14 0'60. (MIRA 13:10)
(Grain--Disinfection) (Methylene)

FREYMAN, I. R.

DOSEBOY, N. I., FREYMAN, I. R. "Accelerated method in the determination of the freshness of flour and groats," In the symposium: Soobshch. i referaty (Vsesoyuz. nauch.-issled. in-t zerna i produktov ego pererabotki), Moscow, 1949, p. 13-14.

SO: L-524C, 17Dec53, (letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

SOSEDOV, N.; FREYMAN, I.; VAKAR, A.

Preventive disinfection of grain with gas and conditions necessary
for degasification. Muk.-elev.prom. 20 no.7:6-8 J1 '54. (MLRA 7:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
ego pererabotki.
(Grain--Disinfection)

FREYMAN, R.

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✓ Influence of dichloroethane and chloropictin on biochemical properties of grain. N. I. Sosolov, Z. B. Drozdova, and I. R. Pefman. *Biokhim. Zerna, Sbornik* 1956, No. 3, 195-220.—Treatment of grain with gaseous dichloroethane (I) does not affect its bread-baking properties because I has no effect on enzymic activities of the grain, with the exception of the coenzyme for glutamine dehydrogenase, the activity of which somewhat declines along with a decrease in the SH-group content. Large quantities of I affect the phys. properties of gluten, decreasing its specific elasticity, accompanied by partial oxidation of the SH groups within the gluten. Gassing of mature wheat grain with chloropictin (II) lowers its seed properties. Immature wheat grain is less affected by II, owing to poor penetration of the gas across the seed membrane. Fumigation by II should be made before the maturation of the grain is completed after harvest. Changes in the bread-baking qualities of wheat subjected to II gassing depend on the effects of the gas on gluten. II sharply depresses the activity of the coenzyme for glutamine dehydrogenase and catalase of grain and reduces the SH content therein, while the activities of diastase, invertase, and phosphatase remain unaffected. The difference in the action of I and II on the properties of seeds and their enzymic systems is due to differences in the affinity of the gases towards the SH groups of the proteins, including enzymes. 106 references.

I. A. Stekol

FREYMAN, I.R., Cand Tech Sci-- (diag) "Study of the process of ^{gasation} ~~evaporation~~
of grain and granaries by a mechanized method." Mos, 1958. 24 pp with draw-
ings (Min of Higher Education USSR. Mos Techno^l Inst of the Food Industry),
130 copies. List of author's works, pp 22-25 (29 titles) (BI, 24-58, 121)

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IVANOVA, Z.; STEPANOV, V.; SOSEDOV, N.; FREYMAN, I. R.

Using AG-16 aerosol generators for the fumigation of empty grain storages. Muk.-elev.prom. 25 no.6:27-28 Je '59.
(MIRA 12:9)

1. Moskovskaya stantsiya Vsesoyuznogo instituta zashchity rasteniy (for Ivanova, Stepanov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki (for Sosedov, Freyman).
(Fumigation) (Granaries)

PERTSOVSKIY, Ye.S.; BERLIN, I.Z.; RODNEVICH, B.N.; FREYMAN, I.A.;
LETNEV, B.Ya., red.

[Protection of cereal products from weapons of mass
destruction] Zashchita khleboproduktov ot oruzhia massovogo
porazhenia. Moskva, Kolos, 1964. 133 p. (MIRA 18:3)

FREYMAN, L.I.

USSR/Physical Chemistry - Electrochemistry

B-12

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3954

Author : Freyman L.I., Titov V.A.

Title : Inhibition of Electro-Diffusion of Hydrogen Into Iron and Steel by Surface Films of Some Metals

Orig Pub : Zh. fiz. khimii, 1956, 30, No 4, 882-888

Abstract : Investigation of the effect of galvanic deposits of Cu, Ni, Sn and Pb (0.1-7 μ) deposited upon the polarization [Me/Fe] and diffusion [Fe/Me] sides of the Armco-Fe membrane or 65G steel membrane, on the electro-diffusion of hydrogen (EDH) in a solution of 10% H_2SO_4 + 2.4 $\cdot 10^{-2}$ M $NaAsO_2$ at $i = 50$ mA/cm² and 21°. Fe and steel were first annealed at 700°. In the case of Me/Fe deposits of Cu, Ni, Sn and Pb have little effect on EDH. With Me/Fe deposits of Cu and Ni inhibit EDH the more so with increasing thickness. Thin deposits of Sn and Pb accelerate EDH, thick deposits inhibit it. The

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FREYMAN, L.I.

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PHASE I BOOK EXPLOITATION

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Gerasimov, Valentin Vladimirovich, ed., Candidate of Chemical Sciences.

Korroziya reaktornykh materialov; sbornik statey (Corrosion of Nuclear-Reactor Materials; a Collection of Articles) Moscow, Atomizdat, 1960. 284 p. 3,700 copies printed.

Ed.: A.I. Zavodchikova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This collection of articles is intended for mechanical and metallurgical engineers as well as for scientific research workers concerned with the construction of nuclear reactors.

COVERAGE: The water corrosion of various types of stainless steel and alloys under high pressures and temperatures is investigated from the point of view of the use of these materials for the construction of nuclear reactors. Attention is given to the following: the use of oxygen for protecting steel against corrosion, the behavior of steel in high-temperature

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Corrosion of Nuclear- (Cont.)

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water with various compositions, factors of metal stress corrosion, intergranular corrosion, the mechanism of corrosion cracking, and the corrosion resistance of aluminum and zirconium alloys. Conclusions based on test results are included. No personalities are mentioned. Most of the articles are accompanied by references. Of 238 references 87 are Soviet.

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PART I. METHODS OF INVESTIGATING WATER
AND ELECTROCHEMICAL CORROSION AT
HIGH TEMPERATURES AND PRESSURES

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Gulyayev, V.N., and P.A. Akol'zin. Methods of Testing the Corrosion-Creep Strength of Metals at High Pressures and Temperatures
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